IN THE SPECIFICATION

On page 1, prior to the Title, please insert the following:

TITLE OF THE INVENTION

On page 1, after the Title to the invention, please insert the following:

BACKGROUND OF THE INVENTION

FIELD OF THE INVENTION

On page 1, prior to line 5, please insert the following:

DESCRIPTION OF THE RELATED ART

On page 7, after line 3, please insert the following:

SUMMARY OF THE INVENTION

On page 9, after line 4, please insert the following:

BRIEF DESCRIPTION OF THE DRAWINGS

On page 9, after line 15, please insert the following:

Figure 5 is a flowchart corresponding to a method according to an embodiment of the invention.

DETAILED DESCRIPTION OF THE INVENTION

On page 18, line 1, please insert the following:

Figure 5 is a flow chart of an embodiment of the present invention. In step 501 a received signal r_t and an already estimated signal received in step 5011 are subtracted. The

subtracted signal is despread in step 502 of the filtering process 5010. The despread signal is decomposed into real and imaginary vectors in step 503. The real and imaginary vectors are matrix processed in step 504 to decorrelate different noise components. A symbol estimated in step 508 is subtracted from the matrix processed real and imaginary signals in steps 505 and 506. Either a hard or soft detection process is applied to the resulting real and imaginary symbols in step 507. If a hard detection is used in step 507, the process includes searching for the closest neighbor in zone Σ_R / Σ_I. The search is restricted to symbols belonging to the modulation constellation. Estimated symbols corresponding to real and imaginary parts of the components of the closest neighbor are obtained. If a soft detection process is used in step 507, a set of the closest neighbors in zone Σ_R / Σ_I is enumerated. The search is restricted to symbols belonging to the modulation constellation. Estimated soft values are derived from components of neighbors, distances between neighbors and corresponding real/imaginary vectors. The hard or soft detection of step 507 results in an estimated vector.